

## **Abstract**

The present invention relates to a method for manufacturing a natural dye using beer sludge, and a dyeing method of a fiber product using a natural dye fabricated by the above method capable of extracting natural components from beer sludge that is a by-product after beer is manufactured. The method includes the steps of a step for drying beer sludge, a step for mixing the dried beer sludge with a certain extraction solvent selected from the group comprising water, electrolysis reduction water, and electrolysis oxidation water, and extracting a coloring component, and a step for filtering an extraction liquid. It is possible to achieve a desired recycling effect using wastes of beer sludge. The woven fabrics dyed using the dyes extracted from beer sludge may be widely adapted to various fiber products and has an excellent laundry fastness and excellent antibiotic property.